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October 26, 2007

Moonlight Basin Ranch
PO Box 1369
Ennis, MT 59729

Attention: Mr. Jon Braxton

Subject: Nuclear Field Density Testing
Moose Creek Subdivision
Moonlight Basin Ranch, Montana

Dear Mr. Braxton:

At your request, we have tested field compaction for earthwork being conducted on Lots 10, 11, 12, and 13 within Moose Creek Subdivision in Moonlight Basin Ranch. The purpose of this work has been to provide you with some reasonable indication that fill materials were being densified consistent with normally accepted standards. Our involvement included only laboratory testing of on-site and structural fill samples (to determine the maximum dry density) as well as nuclear densometer testing during fill placement and compaction per your request.

An initial silty gravel sample was provided to us on August 24, 2007 for laboratory testing of maximum dry density; results from this test found a maximum dry density of 119.4 pounds per cubic foot (pcf) and an optimum moisture content of 11.8 percent. Initial densometer testing was subsequently conducted (on August 30, 2007), and the placed material appeared much different from the sampled material. Thus, additional samples were collected and tested on August 31, 2007 and September 5, 2007. Laboratory testing found maximum dry densities of 121.6 pcf and 134.9 pcf for subgrade and Structural Fill materials. You then selected which material was to be placed at the site and requested further compaction testing. Following September 5, 2007, the Structural Fill/pit run material was used almost exclusively on the lot building sites. Results from all laboratory tests are attached.

Any material placed before September 5, was removed and replaced with Structural Fill/pit run material as density testing of the on-site fill did not meet the typical acceptance criterion. Our geologist was on-site six additional times for field density testing, when requested by the site contractor. For building purposes, it was assumed that a minimum 98 percent of the laboratory dry density value per ASTM D698 was desired. This was generally met, with a few exceptions, as shown on the attached nuclear densometer test results; in areas where failing tests occurred, the site contractor was advised to recompact prior to placement of additional fill. Compaction of the material was not fully completed before the winter season, and additional compaction and testing is recommended next spring as the in-place fill dries, allowing repair of winter effects, and additional fill can be placed.

We can be of assistance in the spring as additional testing is needed for the final fill lifts. Please contact our office with any questions or concerns.

Sincerely,

Brenda C. Green
Staff Geotechnical Engineer

Gary A. Quinn, P.E.
Senior Geotechnical Engineer

In two copies
Enclosures

Job No. **07-352** Date **10/26/07**

Project **Moose Creek Subdivision**
Moonlight Basin Ranch

Source of Material

Lab No.

Point ID and Depth **Structural Fill - Pit Run**

Description of Material **Silty Gravel With Sand**

Test Method **ASTM D698**

Rammer Type **Manual, 5.5 #**

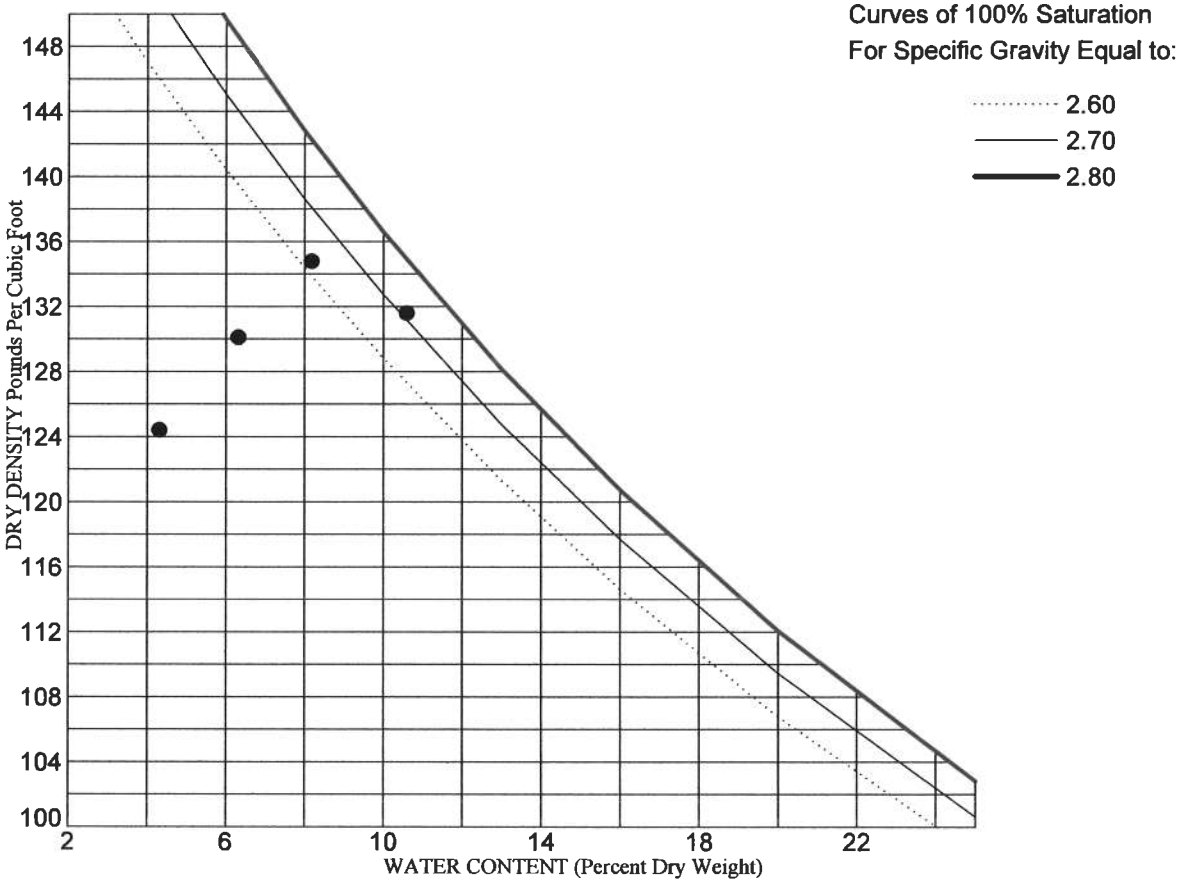
TEST RESULTS

Maximum Dry Density **134.9PCF**

Optimum Water Content **8.7%**

ATTERBERG LIMITS

LL	PL	PI
%	%	%



MOISTURE-DENSITY RELATIONSHIP

NTL Engineering & Geoscience, Inc.
Great Falls, MT 59404

Plate No. 2

Job No. **07-352** Date **10/26/07**

Project **Moose Creek Subdivision**
Moonlight Basin Ranch

Source of Material

Lab No.

Point ID and Depth **Subgrade Fill**

Description of Material **Silty Gravel With Sand**

Test Method **ASTM D698**

Rammer Type **Manual, 5.5 #**

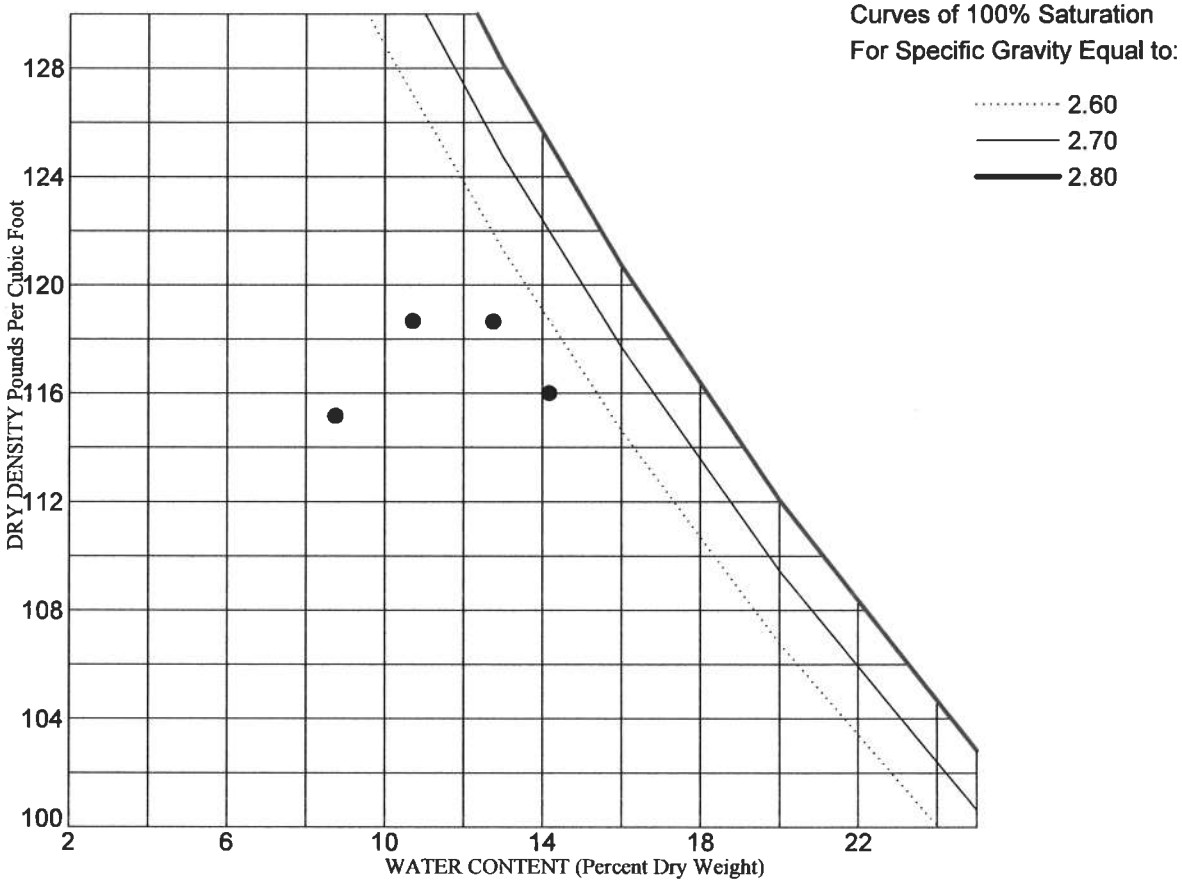
TEST RESULTS

Maximum Dry Density **119.4PCF**

Optimum Water Content **11.8%**

ATTERBERG LIMITS

LL	PL	PI
%	%	%



MOISTURE-DENSITY RELATIONSHIP

NTL Engineering & Geoscience, Inc.
Great Falls, MT 59404

Plate No. 3

Job No. **07-352** Date **10/26/07**

Project **Moose Creek Subdivision**
Moonlight Basin Ranch

Source of Material

Lab No.

Point ID and Depth **Structural Fill - 3-inch Minus**

Description of Material **Silty Gravel With Sand**

Test Method **ASTM D698**

Rammer Type **Manual, 5.5 #**

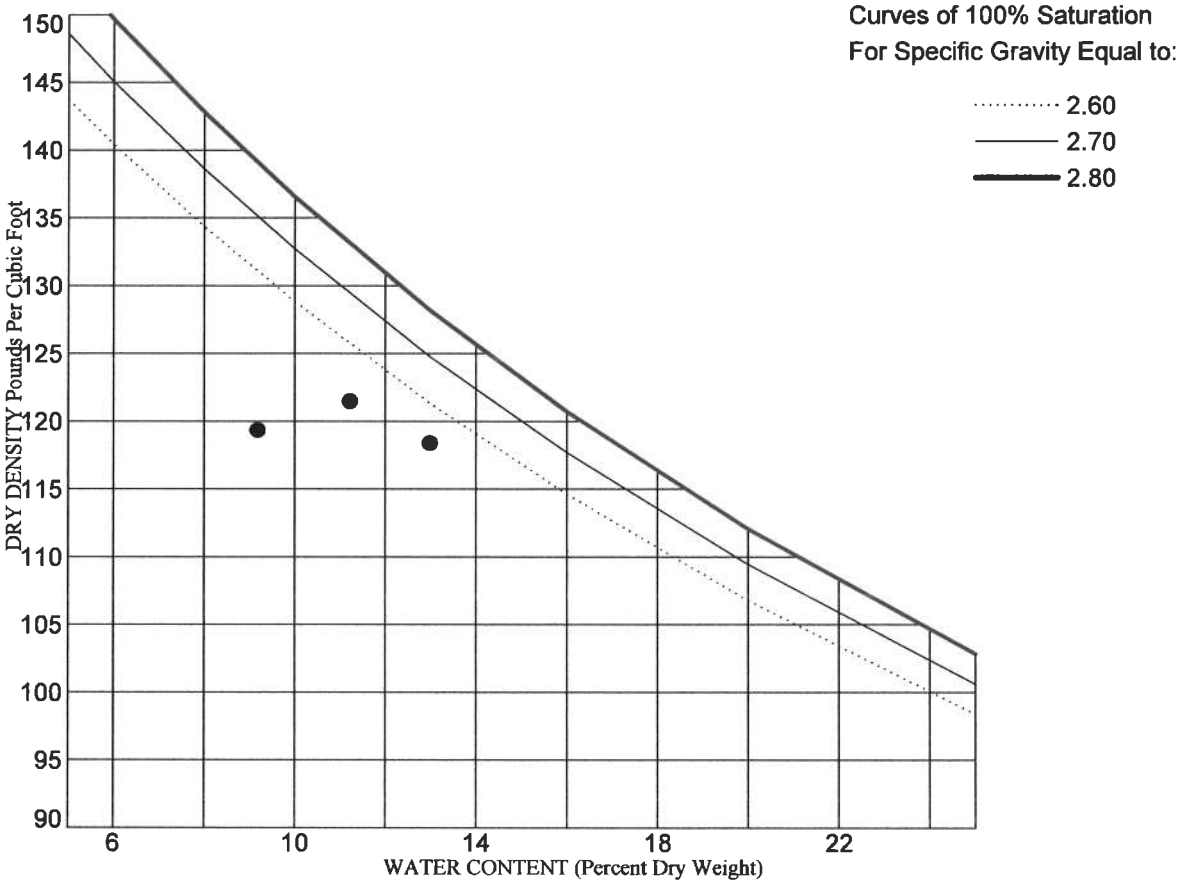
TEST RESULTS

Maximum Dry Density **121.6PCF**

Optimum Water Content **11.4%**

ATTERBERG LIMITS

LL	PL	PI
%	%	%



MOISTURE-DENSITY RELATIONSHIP

NTL Engineering & Geoscience, Inc.
Great Falls, MT 59404

Plate No. 1

NTL Engineering & Geoscience, Inc.
1392 13th Ave SW
Great Falls, MT 59404
Phone: 406.453.5400

Report To: Moonlight Basin Ranch
PO Box 1369
Ennis, MT 59729

Date: 10/23/2007

Invoice Number:

Job Number: 07-352

Report Of: Nuclear Field Density Tests

Project: Moose Creek Subdivision-Moonlight Basin Ranch

Test Description

Nuclear field density testing, performed in accordance with ASTM D2922 and ASTM D3017, was conducted for the referenced project. Results of field density are presented in the following summary along with test date, location, and applicable maximum laboratory density.

Test Results Summary

Lab Number	Test Date	Moisture Content (%)	Dry Density (pcf)	Maximum Lab Dry Density/ (Curve Lab #)	Percent of Lab Maximum Density Obtained (%)	Percent of Lab Maximum Density Required (%)
1	8/30/2007	14.5	110.6	119.2	92.8	98.0
Location: Lot 10; Center of Pad (2.0 feet below grade)						
2	8/30/2007	14.5	110.9	119.2	93.0	98.0
Location: Lot 10; 2.5 West of Center (2.0 below grade)						
3	8/30/2007	15.3	99.2	119.2	83.2	98.0
Location: Lot 11; NW Corner (8.0 feet below grade)						
4	9/4/2007	16.0	110.4	119.2	92.6	98.0
Location: Lot 11; NW Corner (8.0 feet below grade)						
5	9/11/2007	7.7	130.8	134.9	97.0	98.0
Location: Lot 11; NW Corner (9.5 feet below grade)						
6	9/12/2007	9.6	129.4	134.9	95.9	98.0
Location: Lot 11; Center of Pad (9.0 feet below grade)						
7	9/12/2007	6.9	128.3	134.9	95.1	98.0
Location: Lot 11; East Side of Pad (9.0 feet below grade)						
8	9/12/2007	7.3	129.6	134.9	96.1	98.0
Location: Lot 11; West Side of Pad (9.0 feet below grade)						
9	9/12/2007	10.5	118.9	134.9	88.1	98.0
Location: Lot 10; NE Corner (4.0 feet below grade)						
10	9/13/2007	5.6	138.4	134.9	102.6	98.0
Location: Lot 11; NW Corner (8.0 feet below grade)						

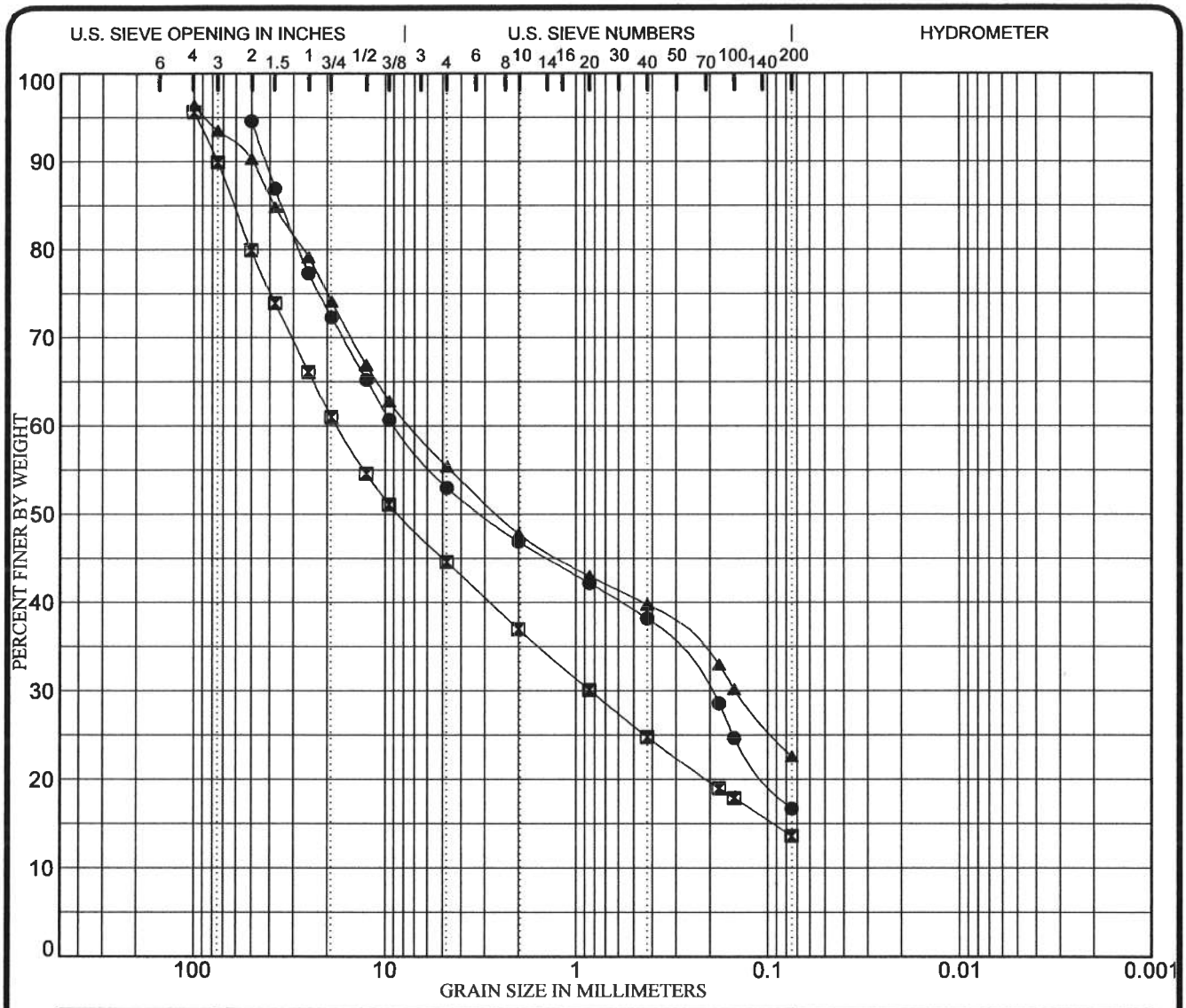
Test Results Summary

Lab Number	Test Date	Moisture Content (%)	Dry Density (pcf)	Maximum Lab Dry Density/ (Curve Lab #)	Percent of Lab Maximum Density Obtained (%)	Percent of Lab Maximum Density Required (%)
11	9/13/2007	7.7	134.6	134.9	99.8	98.0
Location: Lot 12, NE Corner (8.0 feet below grade)						
12	9/13/2007	8.9	134.3	134.9	99.6	98.0
Location: Lot 11; SW Corner (7.0 feet below grade)						
13	9/13/2007	8.7	133.0	134.9	98.6	98.0
Location: Lot 12; SE Corner (7.0 feet below grade)						
14	9/13/2007	13.6	111.6	119.2	93.6	98.0
Location: Lot 13; SW Corner (5.0 feet below grade)						
15	9/13/2007	10.2	116.2	119.2	97.5	98.0
Location: Lot 13; NW Corner (5.0 feet below grade)						
16	9/17/2007	6.8	131.8	134.9	97.7	98.0
Location: Lot 11; NW Corner (2.0 feet below grade)						
17	9/17/2007	7.7	135.5	134.9	100.4	98.0
Location: Lot 11; SW Corner (2.0 feet below grade)						
18	9/17/2007	7.5	134.1	134.9	99.4	98.0
Location: Lot 11; SE Corner (2.0 feet below grade)						
19	9/17/2007	6.7	132.3	134.9	98.1	98.0
Location: Lot 12; SW Corner (2.0 feet below grade)						
20	9/17/2007	8.1	132.8	134.9	98.4	98.0
Location: Lot 12; NW Deck Footing (at grade)						
21	9/19/2007	8.5	135.5	134.9	100.4	98.0
Location: Lot 12; SE Corner (0.2 feet below grade)						
22	9/19/2007	8.5	135.9	134.9	100.7	98.0
Location: Lot 12; NE Corner (0.2 feet below grade)						
23	9/19/2007	7.0	136.0	134.9	100.8	98.0
Location: Lot 11; NW Corner (1.0 feet below grade)						
24	9/19/2007	9.3	133.8	134.9	99.2	98.0
Location: Lot 11, SE Corner (1.0 feet below grade)						
25	9/27/2007	8.2	132.4	134.9	98.1	98.0
Location: Lot 11; SE Corner						

Test Results Summary

Lab Number	Test Date	Moisture Content (%)	Dry Density (pcf)	Maximum Lab Dry Density/ (Curve Lab #)	Percent of Lab Maximum Density Obtained (%)	Percent of Lab Maximum Density Required (%)
26	9/27/2007	7.9	124.7	134.9	92.4	98.0
Location: Lot 11; NE Corner						
27	9/27/2007	8.4	132.1	134.9	97.9	98.0
Location: Lot 11; Middle-West Wall						
28	9/27/2007	7.3	133.2	134.9	98.7	98.0
Location: Lot 13; Middle-East Wall						
29	9/27/2007	7.2	133.7	134.9	99.1	98.0
Location: Lot 12; SE Corner						
30	9/27/2007	6.9	135.7	134.9	100.6	98.0
Location: Lot 12; NE Corner						

Reviewed By: _____



COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

Specimen Identification	Classification	MC%	LL	PL	PI	Cc	Cu
● Structural Fill - 3-inch Minus	Silty Gravel With Sand GM						
⊠ Structural Fill - Pit Run	Silty Gravel With Sand GM						
▲ Subgrade Fill	Silty Gravel With Sand GM						

Specimen Identification	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
● Structural Fill - 3-inch Minus	[illegible]	8.92	0.204		41.6	36.3	16.7	
⊠ Structural Fill - Pit Run	100.00	17.80	0.839		45.3	31.0	13.6	
▲ Subgrade Fill	100.00	7.31	0.147		38.1	32.8	22.6	

PROJECT Moose Creek Subdivision
Moonlight Basin Ranch

JOB NO. 07-352
DATE 10/26/07

GRADATION CURVES

NTL Engineering & Geoscience, Inc.
Great Falls, MT 59404

Plate No. 4